DISCUSSION DRAFT ONLY **TREATMENT LEVELS FOR VARIOUS CLASSES OF BMPS**

Treatment Level – LOW

BMP Type	Quality Sizing/Treatment Volume	Quantity Control Benefits
Flow-through Sedimentation Devices	1 yr peak flow = DEP approved flow for the device. Bypass flow > DEP approved flow for the device. *	None
Vegetated Filters / Buffers	Waiting for John's info	Waiting for John's info
Extended Detention	12 hour extended detention of one year storm	Provides channel protection
Under-drained Soil Filters/ Filter Devices	0.4" runoff from impervious areas + 0.2" runoff from non-impervious developed areas	
Infiltration Systems	0.4" runoff from impervious areas + 0.2" runoff from non-impervious developed areas	
Swales w/ check dams	?	?

Treatment Level – MEDIUM

BMP Type	Quality Sizing/Treatment Volume	Quantity Control Benefits
Vegetated Filters / Buffers	Waiting for John's info	Waiting for John's info
Under-drained Soil Filters/ Filter Devices	0.7" runoff from impervious areas + 0.3" runoff from non-impervious developed areas. Treatment volume reduced by 25% if non-roof runoff pretreated approved flow-through sedimentation device. *	Provides channel protection
Infiltration Systems	0.7" runoff from impervious areas + 0.3" runoff from non-impervious developed areas. Treatment volume reduced by 25% if non-roof runoff pretreated approved flow-through sedimentation device. *	Provides channel protection
Extended Detention	12 hour extended detention of one year storm with under-drained gravel outlet	Provides channel protection
Wet Ponds	Permanent Pool volumes w/o ice Length:Width = 4:1 1.0" runoff from impervious areas 0.4" runoff from landscaped areas Lenghth:Width = 2:1 – 4:1 1.5" runoff from impervious areas 0.6" runoff from landscaped areas Length:Width = 1:1 – 2:1 2.0" runoff from impervious areas 0.8" runoff from landscaped areas *note: if 2 ponds are used, total volume may be reduced by 20%*	Channel Protection provided if 12 hour extended detention of 1 year storm is included on top of permanent pool Flood protection provided if 25 year peak flow detention is provided on top of permanent pool

Treatment Level – HIGH

BMP Type	Quality Sizing/Treatment Volume	Quantity Control Benefits
Vegetated Filters / Buffers	Waiting for John's info	Waiting for John's info
Under-drained Soil Filters/ Filter Devices	1.0" runoff from impervious areas + 0.4" runoff from non-impervious developed areas. Treatment volume reduced by 25% if non-roof runoff pretreated approved flow-through sedimentation device. *	Provides channel protection
Infiltration Systems	1.0" runoff from impervious areas + 0.4" runoff from non-impervious developed areas. Treatment volume reduced by 25% if non-roof runoff pretreated approved flow-through sedimentation device. *	Provides channel protection
Extended Detention	12 hour extended detention of one year storm with under-drained soil filter outlet	Provides channel protection
Wet Ponds	Permanent Pool volumes w/o ice Length:Width = 4:1 2.0" runoff from impervious areas 0.8" runoff from landscaped areas Lenghth:Width = 2:1 – 4:1 2.5" runoff from impervious areas 1.0" runoff from landscaped areas Length:Width = 1:1 – 2:1 3.0" runoff from impervious areas 1.2" runoff from landscaped areas *note: if 2 ponds are used, total volume may be reduced by 20%*	Channel Protection provided if 12 hour extended detention of 1 year storm is included on top of permanent pool Flood protection provided if 25 year peak flow detention is provided on top of permanent pool

The above quality sizing/treatment volumes apply if at least 95% of the developed area in the project is treated. If less than 95% is being treated, the treatment volume for the BMPs providing treatment must be adjusted as follows:

New treatment volume (TV) = TV impervious from table [1 + (% impervious untreated)/100] + TV non-impervious from table [1 + (% non-impervious untreated)/100]

In all cases at least 80% of the project's developed area, including at least 80% of the project's non-roof impervious areas, must be treated.

"Developed areas" include all impervious areas, lawns, and landscaped shrub and garden areas, but do not include forest or meadow.

* DEP approved flow = flow at which at least 80% of OK-110 size silica sand during DEP confirmed test of device.